

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al. (2001/0006218), (hereinafter referred to as "Takada") in view of Kneller (5568189).

Regarding claim 1, Takada discloses an apparatus that relates to a surveillance camera (Takada: paragraph 0002). This apparatus comprises "a frame affixed to a mounting surface for supporting the camera" (Takada: figure 1), "a first member rotationally mounted to the frame defining a first axis of rotation" (Takada: figure 1; paragraph 0028, wherein the first axis is the pan axis), "a second member rotationally mounted to the first member defining a second axis of rotation intersecting the first axis" (Takada: figure 1; paragraph 0028, wherein the pan and tilt axis intersect each other), and "the camera rotationally mounted to the second member at a location spaced from the second axis of rotation, wherein the camera rotates around at least a third and fourth axis

relative to the second member" (Takada: figure 1; paragraphs 002, 0028, 0031, wherein the camera swivels 360 degrees thus rotating around 4 axes). However, this apparatus lacks the ascending and descending movement as claimed. Kneller teaches that prior art camera systems place great stress on motors and cables (Kneller: column 1, lines 40-52). To help alleviate this problem, Kneller discloses "the second member providing the camera ascending and descending movement" (Kneller: column 4, lines 25-41). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Takada and add the camera movement system taught by Kneller in order to obtain an apparatus that helps reduce the stress placed on cables and motors of the imaging system.

Regarding claim 2, Takada discloses "the mounting surface comprises a generally horizontal plane" (Takada: figure 1).

Regarding claim 3, Takada discloses "the frame comprises a truss suspended from the mounting surface" (Takada: figure 1).

Regarding claim 4, Takada in view of Kneller disclose "an actuator provides driving movement to the second member thereby rotating the second member around the axis" (Takada: paragraphs 0028-0031; Kneller: column 4, lines 30-35).

Regarding claim 5, Takada in view of Kneller disclose "the actuator provides driving movement thereby rotating the second member around the

second axis of rotation" (Takada: paragraphs 0028-0031; Kneller: column 4, lines 30-35).

Regarding claim 6, Takada discloses "a drive motor connected to the first member thereby rotating the first member around the first axis" (Takada: paragraphs 0028-0031, wherein the drive motor is the pan motor).

Regarding claim 7, Takada discloses "a mount connecting the camera to the second member" (Takada: figure 1).

Regarding claim 8, Takada discloses "the mount includes a first motor for rotating the camera around the third axis thereby panning the camera" (Takada: paragraphs 0028-0031).

Regarding claim 9, Takada discloses "a second motor for rotating the camera around the fourth axis thereby tilting the camera" (Takada: paragraphs 0028-0031).

Regarding claim 10, Takada discloses "the first member comprises a distal end spaced from the frame and the second axis is positioned generally adjacent the distal end" (Takada: figures 1-2 and 6).

Regarding claim 11, Takada discloses "the first member comprises a distal end spaced from the frame and second axis is spaced from the distal end" (Takada: figures 1-2 and 6).

Regarding claim 12, Takada in view of Kneller disclose "the actuator being connected between the distal end of the first and second member at a location

spaced apart from the second axis of rotation" (Takada: paragraphs 0028-0031; Kneller: column 4, lines 30-35).

Regarding claim 13, Takada in view of Kneller disclose "providing a camera assembly suspended above the event wherein the assembly supports a camera movable around four axis defining 360 degree line of sight for the camera" (Takada: figures 1-2 and 6; paragraphs 0002, 0028-0031), "filming the event with the camera by moving the camera around the four axis thereby generating a virtual image of the event" (Takada: figures 1-2 and 6; paragraphs 0002, 0028-0031), "providing the camera ascending and descending movement" (Kneller: column 4, lines 25-41), "providing a control device located at a remote location capable of moving the camera around the axis and moving the camera from the remote location" (Kneller: figure 12; column 4, lines 60-64).

Regarding claim 14, Kneller discloses "providing a controller programmable for operating the camera from the remote location" (Kneller: column 4, lines 60-64).

Regarding claim 15, Takada in view of Kneller disclose "following the event when the event moves below the camera by moving the camera around the four axis from the remote location" (Takada: figure 1; paragraphs 0002, 0028-0031; Kneller: column 4, lines 60-64).

Regarding claim 16, although not disclosed, it would have been obvious to move the camera via the control device to a predetermined line of sight (Official

Notice). Doing so would have been obvious in order to better help track the target object.

Regarding claim 17, note the examiners rejection for claim 13, and in addition, although not disclosed, it would have been obvious to improve the image quality of the image generated by the camera (Official Notice). Doing so would have been obvious in order to deliver a high quality picture to the user.

Regarding claim 18, although not disclosed, it would have been obvious to reduce the vibration generated by the camera movement (Official Notice). Doing so would have been obvious in order to deliver a clear image to the user.

Regarding claim 19, Kneller discloses "signally a location of the camera to the controller" (Kneller: column 4, lines 60-64. By making camera adjustments from a remote location, the current location of the camera must be known).

Regarding claim 20, Takada discloses "filming the event from 360 degrees with a single camera in real time" (Takada: paragraph 0002).

Regarding claim 21, Takada discloses "rotating the camera around the four axis simultaneously" (Takada: figures 1-2 and 6; paragraphs 0002, 0028-0031, wherein the camera can be rotated around all four axes at the same time).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CZEKAJ whose telephone number is (571)272-7327. The examiner can normally be reached on Mon-Thurs and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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